

TO: All Planning and Development Services Department Customers

SUBJECT: INFORMATION BULLETIN 153

Requirements for Photovoltaic Systems

(Commercial/Residential)

DATE: October 13, 2008

As a customer service initiative, the Planning and Development Services Department (PDSD) of COSA has created this information bulletin to outline some of the general requirements for plan submittals, permitting, and inspections of photovoltaic systems in our city.

The following information is provided to help get your installation through PDSD plan review and our permitting process in a timely manner. Your cooperation in providing this information will ensure that your project will be reviewed in a minimum of (10) working days and help ensure that your permit process flows smoothly including inspections.

REQUIRMENTS:

<u>A.</u> All electrical work shall be performed by a licensed electrical contractor registered with PDSD and must meet requirements of all applicable current adopted codes. Minimum registration requirements along with current codes can be found by visiting our website at www.sanantonio.gov/dsd.

 $\underline{\mathbf{B}}$. Must provide two (2) complete sets of plans and specifications; both of which must be signed by the applicant, contractor or engineer when applicable. The plans must include the following information:

1. Site Plan – show the location of:

- a. Structure on the property
- **b**. Main Electrical Service
- c. Photovoltaic (PV) equipment:
 - Inverters
 - Batteries (if any)
 - Arrays
 - Etc.

2. Array Design:

- a. Provide Roof Plan showing:
 - Array layout
 - Roof covering, type and number of overlays, type of roof deck
 - Rafter or beam sizes, spacing and roof slope
- **b.** Array/Panel fastening method
 - Provide fastening cut sheets from manufacturer or engineered design for anchorage and support of array panels to roof structure

- Method of sealing roof penetrations
- **c.** Provide engineering calculations for roof-mounted array systems weighing more than six (6) lbs/sq. ft from a structural engineer licensed in the State of Texas.

3. Electrical and System Information

- **a.** Provide a single or three-line diagram showing:
 - Size and type of conductors.
 - Voltage and amperage of all circuits
 - Over current protection
 - Equipment grounding
 - Disconnection devices AC & DC
- b. Rating of main service and size of main service disconnect
- **c.** Provide manufacturers cut sheets and listing information for all components.
- **d.** Batteries must be installed in a listed racking system and located in areas that are provided with ventilation in accordance with manufacturer's instructions.
- **e**. Systems installed on structures other than 1 and 2 family dwellings will need electrical drawings to be prepared by a professional engineer licensed in the State of Texas.

<u>C</u>. After installation is completed, contractor must request inspection with PDSD. Inspections can be requested by using the online service tools found on our website at http://www.sanantonio.gov/dsd or by contacting customer service at (210) 207-1111. PDSD is averaging 95% of conducting the inspections on the day they were scheduled for.

Interactive systems that will be connected to the utility grid will also need to be coordinated with CPS Energy. Information on this process can be found by visiting the CPS Energy website at www.cpsenergy.com or by contacting Matt Haecker at (210) 353-3780.

For more information or questions pertaining to the plan review and permitting process, please contact our customer service staff at (210) 207-1111. Specific questions pertaining to the installation and inspections of these systems can be directed to the Chief Electrical Inspector at (210) 207-8286